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EXAMINER
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WATKINS, MARCIA LYNN

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* DAVID A. LEIBEL

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Appeal 2014-009398  
Application 12/029,429<sup>1</sup>  
Technology Center 3700

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Before STEFAN STAICOVICI, ANNETTE R. REIMERS, and  
SEAN P. O'HANLON, *Administrative Patent Judges*.

STAICOVICI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

David A. Leibel (Appellant) appeals under 35 U.S.C. § 134(a) from the Examiner's final decision rejecting claims 1–7, 9, 12, 14, 21–24, 26–29, and 34–45.<sup>2</sup> We have jurisdiction over this appeal under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We REVERSE.

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<sup>1</sup> According to Appellant, Small Bone Innovations, Inc, is the real party in interest. Appeal Br. 2 (filed Mar. 19, 2014).

<sup>2</sup> Claims 8, 10, 11, 13, 15–20, 25, and 30–33 are canceled. *Id.*

## INVENTION

Appellants' invention relates to "a radial head implant for replacement of a head portion of a radius bone." Spec., para. 6.

Claims 1 and 21 are independent. Claim 1 is illustrative of the claimed invention and reads as follows:

1. A radial head implant for replacement of a head portion of a radius bone comprising:
  - a head having a proximal surface including a substantially concave recess configured to articulate with a capitellum of a humerus bone;
  - a stem; and
  - a locking mechanism configured to secure said head to said stem when said head is fully engaged with said stem, said locking mechanism comprising:
    - a longitudinal channel having a first end, a second end, an end notch disposed at the second end, and a tab notch disposed at a position between the first end and the second end;
    - a mating portion engageable with the longitudinal channel in a dovetail interaction such that the mating portion is positioned in the longitudinal channel between the first end and the tab notch when the head is secured to the stem; and
    - an elongate spring arm having a longitudinal axis, a locking tab and an end tab, each of the locking tab and the end tab protruding from a first surface of the spring arm in a direction that is substantially transverse to the longitudinal axis, and wherein said end notch is adapted to engage said end tab and said tab notch is adapted to engage said locking tab when the head is secured to the stem.

## REJECTIONS

The following rejections are before us for review:

- I. The Examiner rejected claims 1–4, 9, 12, 14, 21–24, 26–29, and 34–45 under 35 U.S.C. § 103(a) as being unpatentable over O’Driscoll (US 2005/0216090 A1, pub. Sept. 29, 2005), Smith (US 5,108,442, iss. Apr. 28, 1992), and Gibbs (US 7,641,698 B1, iss. Jan. 5, 2010).
- II. The Examiner rejected claims 5–7 under 35 U.S.C. § 103(a) as being unpatentable over O’Driscoll, Smith, Gibbs, and Cooney (US 6,709,459 B1, iss. Mar. 23, 2004).

## ANALYSIS

The Examiner finds that O’Driscoll discloses most of the limitations of independent claims 1 and 21, but fails to disclose a locking mechanism including a longitudinal channel with an end notch and tab notch, and a spring arm with an end tab and a locking tab. Final Act. 2–3 (citing O’Driscoll, paras. 68–73, 110–113, and Figs. 1, 15, 16) (mailed Mar. 19, 2013). Nonetheless, the Examiner finds that Smith discloses a locking mechanism to lock and unlock a stem component to a head component including spring arm 32 having locking tab 34 that is received by tab notch 58. *Id.* at 3 (citing Smith, Figs. 1, 4–6). The Examiner further finds that Gibbs discloses a “stem attachment mechanism in bone prosthetics” including end tab 162 received in end notch 126 of elongated channel 112. *Id.* at 4 (citing Gibbs, col. 3, l. 65–col. 4, l. 3, Figs. 6–8). The Examiner concludes that that it would have been obvious for a person of ordinary skill in the art “to modify the device of O’Driscoll by substituting the securement

mechanism of Smith in the invention of O'Driscoll as a functional equivalent with predictable results and a reasonable expectation of success" and "to . . . provide an easy release mechanism that does not require screwing during surgery . . . and that is easier to remove than unscrewing of a screw." *Id.* at 3–4. The Examiner further determines that it would have been obvious for a person of ordinary skill in the art to provide end notch 126 and end tab 162 of Gibbs in the longitudinal channel and on the spring arm, respectively, of O'Driscoll's device, as modified by Smith, "in order to aid in slidably guiding the components into engagement (i.e. seating of the components)." *Id.* at 5 (citing Gibbs, col. 3, l. 65–col. 4, l. 3).

Appellant argues that the Examiner arrived at the rejection by employing impermissible hindsight reconstruction. *See* Appeal Br. 9. Appellant more specifically argues that "the Examiner is selectively identifying various components in the prior art then impermissibly using the current application as a roadmap to modify the cited references to improperly arrive at what the Examiner purports to be the claimed invention." *Id.* According to Appellant, as Smith teaches a single groove 50 and Gibbs discloses a single slot 126, "none of the cited prior art teach . . . that multiple notches should be used, nor what benefit such additional notch(es) may provide." Reply Br. 5 (filed Sept. 2, 2014).

As the reason proffered by the Examiner, i.e., "in order to aid in slidably guiding the components into engagement," appears to already be performed by the O'Driscoll's device, as modified by Smith, we agree with Appellant that the rejection appears to improperly rely on hindsight reconstruction using the claims as a guide.

Smith discloses that as “component **20** moves in the direction of arrow **52** . . . , ramp surface **56** engages the tab **34** of spring clip [30] and forces the tab **34** in the direction of arrow **58** into . . . section **44** of recessed portion **28**.” Smith, col. 4, ll. 20–24, Figs. 4, 5. Smith further discloses that “[a]fter . . . component **20** is fully inserted onto . . . component **12** . . . tab **34** of spring clip **30** springs upwardly in the direction of arrow **60** . . . so that the tab **34** enters groove **50**.” *Id.*, col. 4, ll. 26–32, Fig. 6. As such, because Smith’s locking mechanism already guides components 12, 20 into engagement, when substituting Smith’s locking mechanism for the locking mechanism of O’Driscoll, as the Examiner proposes, the locking mechanism in the device of O’Driscoll’s, as modified by Smith, will likewise guide O’Driscoll’s head component 194 and stem component 192 into engagement. *See* O’Driscoll, Fig. 15.

Although we appreciate that elements of O’Driscoll, Smith, and Gibbs can be combined, this does not, in itself, provide a reason to combine them. Rather, an obviousness rejection further must explain the reasoning to support the Examiner’s conclusion of obviousness. *Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1328–30 (Fed. Cir. 2009). In this case, the Examiner has not adequately explained why providing end tab 162 and end notch 126, as taught by Gibbs, to the device of O’Driscoll, as modified by Smith, will “aid in slidably guiding the components into engagement (i.e. seating of the components).” *See* Final Act. 5. As noted above, the locking mechanism in the device of O’Driscoll, as modified by Smith, already guides head component 194 and stem component 192 into engagement. The Examiner has not provided any findings that either O’Driscoll or Smith recognized a problem with guiding components into engagement. Without a

persuasive, articulated reasoning based on rational underpinnings for modifying the device of O'Driscoll, as modified by Smith, with the teachings of Gibbs, the Examiner's rejection appears to be the result of hindsight analysis. *See In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (*cited with approval in KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)).

In conclusion, for the foregoing reasons, we do not sustain the rejection of claims 1–4, 9, 12, 14, 21–24, 26–29, and 34–45 as unpatentable over O'Driscoll, Smith, and Gibbs.

With respect to the rejection of claims 5–7, the Examiner's use of the Cooney disclosure does not remedy the deficiency of the Examiner's combination of the teachings of O'Driscoll, Smith, and Gibbs. *See* Final Act. 9–10. Accordingly, we also do not sustain the rejection of claims 5–7 under 35 U.S.C. § 103(a) as unpatentable over O'Driscoll, Smith, Gibbs, and Cooney.

#### SUMMARY

The Examiner's decision to reject claims 1–7, 9, 12, 14, 21–24, 26–29, and 34–45 is reversed.

#### REVERSED